D H E C PROMOTE PROTECT PROSPER	Mining Form MR-400	S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL BUREAU OF LAND AND WASTE MANAGEMENT DIVISION OF MINING AND SOLID WASTE PERMITTING 2600 Bull Street, Columbia, SC 29201 Telephone Number: (803) 896-4261 Fax Number: (803) 896-4001

APPLICATION FOR A MINE OPERATING PERMIT
DHEC FORM MR-400 DATE VERSION ADOPTED 7/1/94

1-601878
F#11106

****

"The South Carolina Mining Act," Sections 48-20-10 through 48-20-310, Code of Laws of South Carolina, 1976, as amended provides in part: "No operator may engage in mining without having first obtained from the Department an operating permit which covers the affected land and which has not been terminated, been revoked, suspended for the period in question, or otherwise become invalided." (Section 48-20-60)

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DIVISION OF MINING & SOLID WASTE MANAGEMENT BL&WM

I. APPLICANT INFORMATION

1. Name of Company: Rea Contracting, LLC

   Check form of business entity: ☑ Corporation ☐ Partnership ☐ Limited Partnership ☐ Sole Proprietorship

2. Name of Proposed Mine: Sand Pit 132 Fishing Creek County: Chester

3. Home Office Address: 8205 Wilkinson Blvd. (Street and P.O. Box) (704) 394-8354 (Telephone No.)

   Charlotte (City) NC (State) (Zip Code) (704)394-5354 (Fax No.)

4. Local Office Address: same as Item 3 (Street and P.O. Box) (803) 482-2342 (Telephone No.)

   (City) (State) (Zip Code) (Fax No.)

5. Designate to which office Official Mail is to be sent (check one):

   ☒ Home Office ☐ Local Office

6. Name of company personnel and their title to be the contact for official business and correspondence:

   Robbie L Robinson- Quality Control Manager

7. Location of Mine: County Hwy No. S-12-77 (State or County Hwy No.) Great Falls (Nearest Town or City)

8. Locate accurately on a county map, USGS 7.5' Topographic Map, or draw a detailed map to scale of: (1) how to get to your local office and (2) how to get to the mine (attach to this application).

9. If land is leased, complete the following:

   A. Name of landowner: Eddie Loftin

   Landowner's Address: 210 Francis Avenue (Street and PO Box) Great Falls (City)

   SC (State) (Zip Code) (803) 482-2342 (Telephone Number)

   B. Date lease became effective: 11-4-08

   Date of lease termination: 11-4-11

   Name of lessee: Rea Contracting, LLC

II. GENERAL CHARACTERISTICS OF MINE:

1. Material(s) to be mined: SAND

2. Mining Method:

   A. List equipment to be used for mining and provide a brief description as to how the mine will be operated.

   The equipment of choice will be a dragline manufactured by linkBelt, Model L-98. The sand will be excavated using the dragline and temporarily stockpiled on the site, until needed for production at off-site asphalt plants. Trees will be cleared in the active mine area to allow access for the equipment and to provide an area for the temporary stockpile of the sand.

   B. Will there be a process plant located at the mine site within the boundary of the permitted area?
   ☐ Yes ☑ No If no, please provide a brief description of the plant equipment and function of the plant.

   The material will be mined for use at an off-site asphalt production plant.

3. Do you anticipate blasting as part of the mining operation? ☐ Yes ☑ No If yes, provide the distance to the nearest inhabited structure not owned or leased by the applicant. Also, provide as an attachment to this application the names and addresses of all the owners of all structures within one-half mile from the nearest point of blasting during the life of the proposed mine. How will flyrock be prevented from being projected from the permitted area?

4. Has this site been mined in the past? If so, please indicate the present condition of the land.

   Yes, the site has been mined in the past. The site was formerly called the Wallace Pit, and was mined by Jim Lineberger Grading and Paving, Inc. under Permit No. 605.

5. What is the expected maximum depth of this mine? Provide any additional information about the final depth of the mine that would be useful to the Department. (Example: Final depth of pit will be level to adjacent road, elevation above Mean Sea Level (MSL)).

   The maximum depth of sand in the stream bed will be approximately 10 feet. The average depth of the sand in the stream bed is approximately 6 feet.

III. DETERMINATION OF PERMITTED ACREAGE, AFFECTED ACREAGE AND RECLAMATION BOND

1. Total acres for which permit is being requested:

   0 Permitted acres owned by the operator

   6.26 Permitted acres leased by the operator

Note: Permitted acreage should include the following: 1) acres of land to be affected (excavation, processing plant, stockpiles, etc.); 2) future area(s) to be mined and 3) land to be used for buffer zones around the affected land. The permitted area should be the property described in the LAND ENTRY AGREEMENT(S) (FORMS MR-600 OR MR-700).

2. Total affected acreage:

	Acres
A) Area used for sediment control ponds	0.38
B) Area used for stockpiles of unprocessed minerals	0.20
C) Area used for spoil (overburden) banks, topsoil and disposal refuse (exclusive of tailings impoundments)	0
D) Areas used for on-site processing facilities and stockpiles of processed minerals	0
E) Areas used for tailings pond (waste material from mineral processing)	0
F) Area for access or haul roads	0.31
G) Area for excavation during the period of this permit **OR** If mining and reclamation are to be done in segments, state the size of each segment (acres)_____. Multiply the size of the segments by 3 and enter the resulting number. ---------->	0.91
H) TOTAL OF 2A THROUGH 2G	1.80

3. Check acreage to be bonded: total affected acreage calculated from Section 2.

   ☑ 0.00 - 9.99 acres (bond amount - $10,000)

   ☐ 10.00 - 14.99 acres (bond amount - $15,000)

   ☐ 15.00 - 24.99 acres (bond amount - $25,000)

   ☐ 25.00 + acres (bond amount - $25,000 or greater)

   Applicant may submit a reclamation cost estimate for mines that will affect greater than 25 acres. Estimate should be based upon requirements in Regulation 89-200 B.

4. Will this operation be covered by a blanket bond? ☑ Yes ☐ No If yes, please list your company's other permitted mining operations in South Carolina giving mine names, permit numbers and state the present reclamation bond amount on file with this Department.

   Present Reclamation Bond Amt. : #167,500

	Name	Permit Number
1.	Turkey Creek Sand Pit 123	I-00177
2.	Oconee Pit Mine #8	I-00536
3.	Smith Pit Mine # 2	I-00075
4.	Carroll Pit Mine #9	I-00602
5.	Grays Hill Borrow Pit	I-00890

5. Number of years for which this permit is requested. The requested number of years the permit is requested should coincide with the Schedule of Reclamation as proposed by the applicant in the RECLAMATION PLAN, (Form MR-500). 10 years

IV. PROTECTION OF NATURAL RESOURCES*

1. Will there be a waste water treatment system at your mine site? ☐ Yes ☑ No
2. Will there be a point source discharge from your plant or mine requiring an NPDES Permit? ☑ Yes ☐ No
   If yes, provide information as to how stormwater and groundwater will be managed?
3. Will there be air contaminant emissions from your plant or mine requiring an Air Quality Permit? ☐ Yes ☑ No
4. Do you anticipate pumping of groundwater? ☐ Yes ☑ No If yes, describe.
5. Will jurisdictional wetlands be affected, filled or altered in any fashion that will require a Section 404 Dredge and Fill Permit? ☐ Yes ☑ No
6. Are there any known cultural or historic sites located within the proposed area to be permitted? ☐ Yes ☑ No
7. Will any part of the permitted area be used as a solid waste describe how waste, trash, scrap metal material, garbage will be handled. ☐ Yes ☑ No

*NOTE: For questions 1-7 that need additional space for explanations, please provide additional information on an attached sheet to this application.

8. Describe the wildlife or freshwater, estuarine or marine fisheries in the area of the mining operation. Also provide information about any ponds and/or streams that may be located in the proposed permitted area.

   Mining operations will be conducted in a freshwater stream identified as Fishing Creek. Little to no impact to aquatic life or wildlife in the stream or in the immediate area of the stream is anticipated. No disturbance of the stream bank will occur except for minimal disturbance for dragline access and location of the stockpile areas.

9. State the land cover and land uses on the permitted land area and contiguous tracts of land to the permitted land area.

   The tract on which mining will occur is currently vacant and predominately grassed and wooded.

10. Describe measures to be taken to insure against (1) substantial deposits of sediment in neighboring streams, rivers lakes or ponds; (2) landslides; (3) acid water formation and discharge. Attach any supporting documents (engineering designs, calculations, sediment & erosion control plan, setbacks, geotechnical information, acid prediction test etc.) to this application.

    Disturbance will be minimized along the stream except at the location of the dragline access area. Excavation will occur in the stream channel to an approximate depth of 10'. No excavations will be deep enough for landslides to occur. No acid water formation or discharge will occur during mining activities. Stormwater will be collected by sediment basins with a stone outlet sections and will provide adequate Sediment & Erosion Control. The stock piles will consist of wet sand with little potential for loss by wind erosion. The existing roads will be wetted as needed to control dust.

V. SAFETY

1. Describe methods to be used during the time the mine operating permit is active to prevent physical hazards to persons and to any neighboring dwelling, house, school, church, hospital, commercial or industrial building or public road. If applicable, provide the zoning designation for the property to permitted.

   The mine entrance will be gated with a locking gate. Proper signage will be located at the mine entrance indicating uses of the mine area.

2. Describe methods to be used to prevent an adverse effect on the purposes of a publicly-owned park, publicly-owned forest, or publicly-owned recreation area. If any of these facilities are within one (1) mile of the proposed affected property, please locate on mine location map and the submitted U.S.G.S topographic map for this application.

   No publicly-owned park, publicly-owned forest, or publicly-owned recreation area exist within 1-mile of the proposed mine.

3. Describe measures to be taken for screening the operation from view from public highways, public parks or residential areas.

   The mine area is approximately 700 feet from the nearest state road. The mine area will be screened from the road by the existing heavily wooded areas.

VI. MINE MAP

1. Provide the U.S.G.S. topographic map(s) that contains the proposed mine site. The proposed permitted area should be outlined on this submitted topographic map.

2. Attach **two (2)** copies of a map of the site (referred to as the MINE MAP) that shows the following:

   A. Outline of the area to be affected by mining during the number of years for which the permit is requested. See Section III, Question 1 on page 3 of this application form.

   B. Outline of the permitted area that shows the buffers zones, future mine areas and areas to be affected by mining.

   C. Outline of the planned pits or excavations for which your company has detailed plans. If your company has reason to believe that additional land may be mined in the future within the permitted area but is not feasible to show as planned excavations; indicate these areas as FUTURE RESERVES on this site map.

   D. Outline of areas for the storage of naturally occurring soil that will be suitable for the establishment of vegetation in final reclamation.

   E. Outline of planned areas for disposal of refuse, exclusive of tailings ponds.

   F. Outline of planned spoil, overburden or other similar waste material disposal areas.

   G. Locations of planned access and haul roads on the area to be affected.

H. Outline of planned tailings ponds.

I. Locations of sediment control pond(s) and other sediment control structures within the affected area. Outline of areas on which temporary or permanent vegetation will be established to control erosion during the mine operation.

J. Location and name (if appropriate) of streams, lakes, wetlands and existing drainage ditches within the area to be permitted. Use arrows to indicate direction of water flow in such streams and drainage ditches.

K. Boundary for the 100 year floodplain, where appropriate.

L. Outline of areas for stockpiles of unprocessed minerals.

M. Outline of area of previously mined land that will not be affected.

N. Outline of the area to be occupied by processing facilities including stockpiles of processed minerals if such facilities are to be an integral on-site part of the mining operation.

O. Show location of the two permanent survey control points.

P. A legend showing the name of applicant, name of the proposed mine, north arrow, county, scale, date of preparation and name and title of person who prepared the site map.

THE REQUIRED SITE MAP SHALL HAVE A NEAT, LEGIBLE APPEARANCE AND BE OF SUFFICIENT SCALE TO CLEARLY SHOW THE REQUIRED INFORMATION LISTED ABOVE. THE BASE FOR THE MAP SHALL BE EITHER A SPECIALLY PREPARED LINE DRAWING, AERIAL PHOTOGRAPH, ENLARGED USGS TOPOGRAPHIC MAP OR A RECENTLY PREPARED PLAT.

3. Provide the most recent county tax map that shows all contiguous land owners of the permitted mine site. Provide name and addresses of all land owners contiguous to the proposed permitted mine site.

4. Provide letter from an attorney attesting to (1) the ownership if the property, (2) ownership of the mineral rights and (3) that the applicant has the legal right to mine the proposed mineral resource on the property as described in this application.

We hereby certify that all information and details contained hereinabove, within any supporting documents and on the map are true and correct to the best of our knowledge. We fully understand that any willful misrepresentation of facts will be cause for permit revocation.

The applicant acknowledges that Section 48-20-130, Code of Laws of South Carolina, provides in part:

"Upon receipt of the operator's annual report or report of completion of reclamation and at any other reasonable time the department may elect, the department shall inspect the permit area to determine if the operator has complied with the reclamation plan, the requirements of this chapter, regulations promulgated by its authority, and the terms and conditions of this permit. Accredited representatives of the department at all reasonable times may enter upon the land subject to the certificate of exploration or operating permit for the purpose of making the inspection."

Robbie L. Robinson

Signature of Applicant/Operator or his Authorized Representative

Robbie L. Robinson

Printed Name of Applicant/Operator or his Authorized Representative

QC Manager

Title

10-20-08

Date

Department Use Only

Application No.: _____ Date Application Approved: _____ Date Bond Rec'd: _____

Bond Amount: _____ Blanket or Single Bond Permit Issuance Date: _____

ACTION TAKEN ON THIS APPLICATION

_____ Approved _____ Denied _____ Approve with additional Terms and Conditions

By:_____
DIVISION DIRECTOR

Date:_____

Attachment:Calculations

WinTR-55 Current Data Description

--- Identification Data ---

User: REA
Project: Fishing Creek
SubTitle:
State: South Carolina
County: Chester
Filename: <new file>

Date: 9/24/2008
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc

Total area: (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.5	4.5	5.1	6.0	6.8	7.3	2.9

Storm Data Source: Chester County, SC (NRCS)
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

RUNOFF CURVE NUMBER COMPUTATION Version 2.10

Project : Fishing Creek User: REA Date: 09-09-2008
County : Chester State: SC Checked: ____ Date: _____
Subtitle: Watershed 1
Subarea : 1

COVER DESCRIPTION	Hydrologic Soil Group A	B	C	D
		Acres (CN)		
DEVELOPING URBAN AREA (No Vegetation)				
Newly graded area (pervious only)	-	1.47(86)	-	-
Total Area (by Hydrologic Soil Group)		1.47		

SUBAREA: 1 TOTAL DRAINAGE AREA: 1.47 Acres WEIGHTED CURVE NUMBER: 86*

* - Generated for use by GRAPHIC method

GRAPHICAL PEAK DISCHARGE METHOD Version 2.10

Project : Fishing Creek User: REA Date: 09-09-2008
County : Chester State: SC Checked: ____ Date: _____
Subtitle: Watershed 1

Data: Drainage Area : 1.47 * Acres
Runoff Curve Number : 86 *
Time of Concentration: 0.10 Hours
Rainfall Type : II
Pond and Swamp Area : NONE

Storm Number	1	2	3	4	5	6	7
Frequency (yrs)	1	2	5	10	25	50	100
24-Hr Rainfall (in)	2.9	3.5	4.5	5.1	6.0	6.8	7.3
Ia/P Ratio	0.11	0.09	0.07	0.06	0.05	0.05	0.04
Used	0.11	0.10	0.10	0.10	0.10	0.10	0.10
Runoff (in)	1.58	2.10	3.00	3.56	4.41	5.17	5.65
Unit Peak Discharge (cfs/acre/in)	1.571	1.578	1.578	1.578	1.578	1.578	1.578
Pond and Swamp Factor 0.0% Ponds Used	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Peak Discharge (cfs)	4 *	5	7	8	10	12	13

* - Value(s) provided from TR-55 system routines

Watershed 1 Basin Calcs

- Runoff Volume

From TR-55 $R = 3.56$ in/acre

$V_{10} = 3.56 \text{ in/ac} \times 1\text{ft}/12\text{in} \times 1.47\text{ac} = 0.44\text{ac-ft}$

$= 19,166 \text{ ft}^3$

Width = 124'
Length = 62' if 2.5' deep $\frac{19,166\text{ft}^3}{2.5\text{ft}} = 7,666.4 \text{ ft}^2$ required surf area

- Weir Length $Q = CLH^{3/2}$ $L = Q/CH^{3/2}$ $h = 0.25'$ $c = 2.5'$ broad crested weir

$L = \frac{10}{2.5(.25)^{3/2}} = 32'$

- Sediment Storage Volume $1.47\text{ac} \times 1800 = 2646$

excavate 1.5' then surface area required

1764

$V = 50 \times 40 \times 1.5 = 3000 \text{ ft}^3$ OK

RUNOFF CURVE NUMBER COMPUTATION Version 2.10

Project : Fishing Creek User: REA Date: 09-09-2008
County : Chester State: SC Checked: ____ Date: _____
Subtitle: Watershed 2
Subarea : 1

COVER DESCRIPTION	Hydrologic Soil Group A	B	C	D
Acres (CN)				
DEVELOPING URBAN AREA (No Vegetation)				
Newly graded area (pervious only)	-	1.65(86)		-
-				
Total Area (by Hydrologic Soil Group)		1.65		

SUBAREA: 1 TOTAL DRAINAGE AREA: 1.65 Acres EIGHTED CURVE NUMBER: 86*

* - Generated for use by GRAPHIC method

GRAPHICAL PEAK DISCHARGE METHOD Version 2.10

Project : Fishing Creek User: REA Date: 09-09-2008
County : Chester State: SC Checked: ____ Date: _____
Subtitle: Watershed 2

Data: Drainage Area : 1.65 * Acres
Runoff Curve Number : 86 *
Time of Concentration: 0.10 Hours
Rainfall Type : II
Pond and Swamp Area : NONE

Storm Number	1	2	3	4	5	6	7
Frequency (yrs)	1	2	5	10	25	50	100
24-Hr Rainfall (in)	2.9	3.5	4.5	5.1	6.0	6.8	7.3
Ia/P Ratio	0.11	0.09	0.07	0.06	0.05	0.05	0.04
Used	0.11	0.10	0.10	0.10	0.10	0.10	0.10
Runoff (in)	1.58	2.10	3.00	3.56	4.41	5.17	5.65
Unit Peak Discharge (cfs/acre/in)	1.571	1.578	1.578	1.578	1.578	1.578	1.578
Pond and Swamp Factor 0.0% Ponds Used	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Peak Discharge (cfs)	4	5	8	9	11	13	15

* - Value(s) provided from TR-55 system routines

Watersted 2 Basin Calcs.

- Runoff Volume

From TR-55 $R = 3.56$ in/acre

$V_{10} = 3.56 \text{ in/ac} \times 1\text{ft}/12\text{in} \times 1.65\text{ac} =$

0.49ac-ft

$= 21,344\text{ ft}^3$

L = 132'
W = 66'

if 2.5' deep = 8537.8 required surf area

- Weir Length $Q = CLH^{3/2}$ $L = Q/CH^{3/2}$ $h = 0.25$ $C = 2.5$

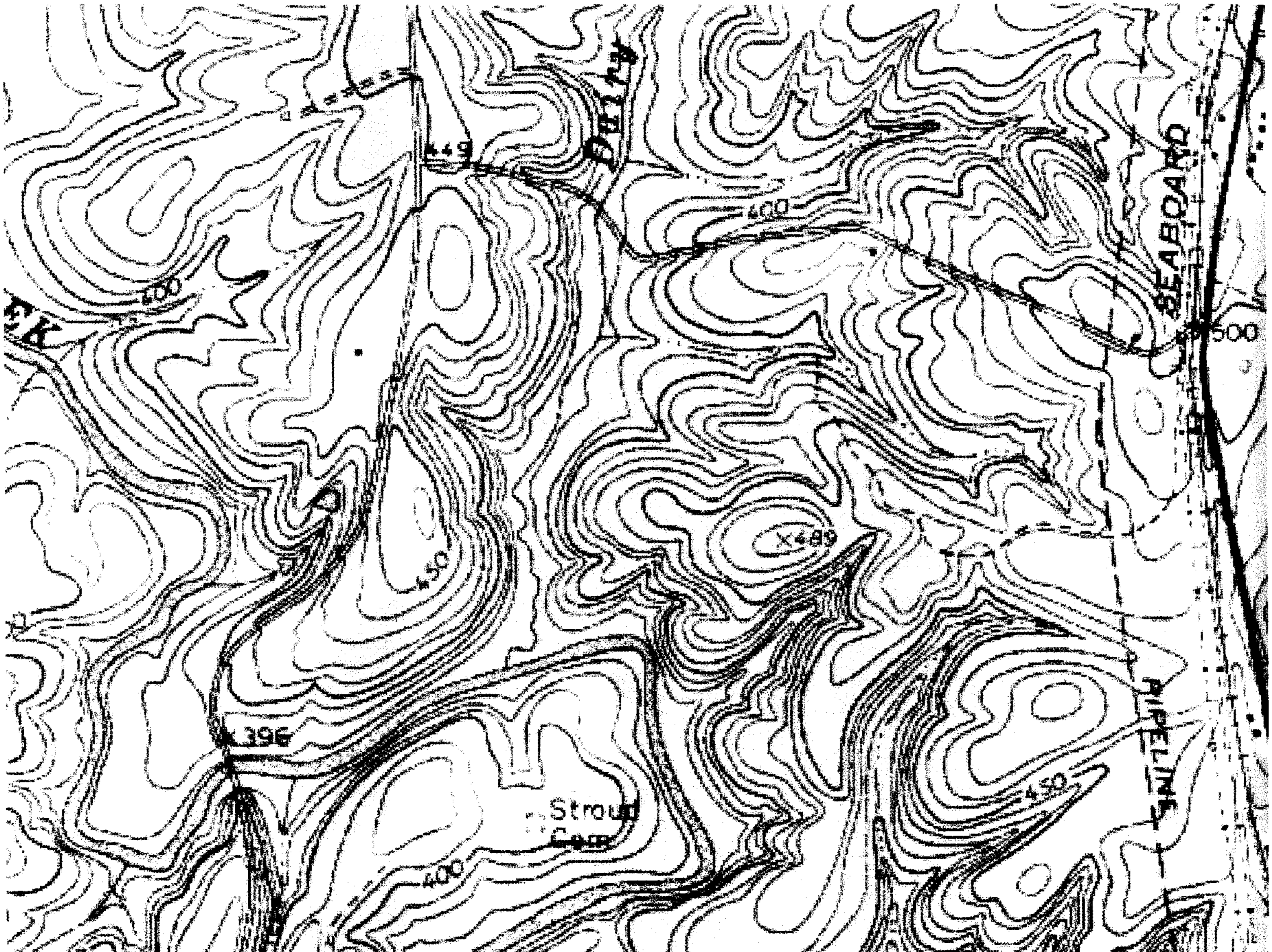
$L = 11/2.5(.25)^{3/2} =$

$L = 35.2$ $L = 36'$

- Sediment Storage $1.65 \times 1800 = 2970\text{ft}^3$

if excavate 1.5'

$V = 50 \times 40 \times 1.5 = 3000\text{ ft}^3$ OK


449
400
SEABOARD
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X489
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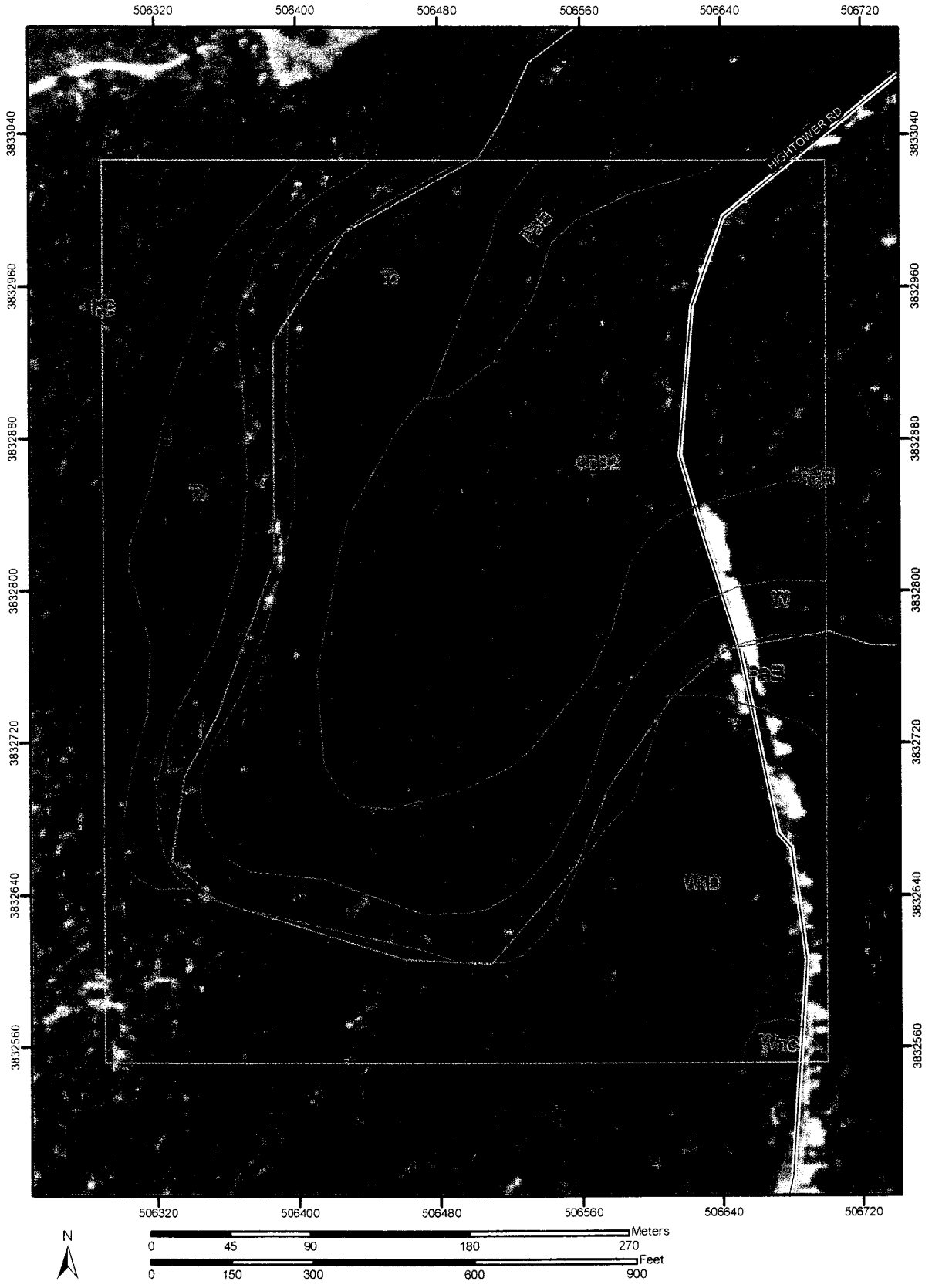
X 396
Stroud
Cem
PIPELINE

Soil Map–Chester County, South Carolina
(Rea Site)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features

Municipalities
- Cities
- Urban Areas

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails

Roads
- Interstate Highways
- US Routes
- State Highways
- Local Roads
- Other Roads

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 17N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Chester County, South Carolina
Survey Area Data: Version 6, Jan 22, 2008

Date(s) aerial images were photographed: 1/22/1994

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Chester County, South Carolina (SC023)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
CnB2	Cecil sandy clay loam, 2 to 6 percent slopes, eroded	14.8	28.6%
IdB	Iredell fine sandy loam, 1 to 6 percent slopes	0.0	0.0%
PaE	Pacolet sandy loam, 10 to 25 percent slopes	2.2	4.3%
To	Toccoa loam	13.8	26.6%
W	Water	5.7	11.0%
WkD	Wilkes sandy loam, 6 to 15 percent slopes	15.1	29.1%
WnC	Winnsboro sandy loam, 6 to 10 percent slopes	0.2	0.4%
Totals for Area of Interest (AOI)		51.8	100.0%